

Aeroflightdynamics Directorate

Ames Research Center, CA & Langley Research Center, VA

CORE CAPABILITIES

Aeromechanics Flight Control Handling Qualities Computational Fluid Dynamics Advanced Design Simulation & Information Technology Human Systems Interface

The Aeroflightdynamics Directorate (AFDD) performs basic and applied research in Army rotorcraft technologies to support the current fleet and prepare for future systems. A world class research organization for the world's best Army.

Physics-Based Modeling

- Aerodynamics & Acoustics
- Dynamics
- · Comprehensive Analysis
- · Fit Control / Handling Qualities
- · Human-System Integration











Simulation

· Full Mission

Part Task

In Flight

Testing & Validation

- Components
- · Model Scale
- Full Scale
- In Flight









Design Synthesis

- · Concept Formulation
- · Concept Evaluation
- · Technology Planning
- · Rapid Prototyping
- Advanced Optimization



The Foundation for Simulation-Based Acquisition of Rotorcraft